Multidisciplinarity and the Tablet: A Study of Writing Practices

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Introduction

> *Profound changes in expressive medium always ask a fundamental question: What does this medium do to us and for us?*
>
> *—Richard Lanham, The Electronic Word, 1993.*

RICHARD LANHAM POSES this question based on the premise that technology is a "rhetorical tool" with the capacity to reshape the values, practices, and possibilities of writing and teaching. Lanham's legacy over the past twenty-plus years has been profound: various iterations of his question have continued to appear as new expressive technologies have emerged and as the "we" to whom Lanham refers has become more broadly imagined: "What does this medium do to us and for us?" As technological media will likely continue to change, "we" (as teachers of writing across disciplines) must continue to ask Lanham's question if we hope to remain engaged with the ways in which lived writing practices persist and change. New technologies may enable changes in writing practices and expectations, and also might reshape the ways in which we write. Whether these changes are positive or negative, welcome or not, they invite us to reexamine our values and practices regarding writing and writing pedagogy, and remind us of the deep role context plays as we enact particular kinds of writing (academic or otherwise) throughout our daily lives.

Perhaps the latest technological medium affecting writing practices is the tablet. Institutions from Seton Hill (Pennsylvania) and Princeton to Oklahoma State and George Fox (Oregon) have been experimenting over the past several years with how to incorporate the tablet, most commonly Apple's iPad, into their pedagogy. This

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ongoing interest has led some to even suggest that the tablet may be putting pressure on "the future of personal computers" (Hardwick). The possibility that tablets may come to replace personal computers lends an even greater urgency to learning more about how they impact the teaching and learning of writing. Despite (or perhaps due to) the considerable buzz surrounding this emerging technology, hardly any tablet studies have deliberately framed the tablet in the terms by which Lanham's work demands: as a rhetorical tool that shapes writing practices. Using Lanham's frame enables us to pose questions about how tablets impact research, learning, writing and knowledge across and within disciplines. Acknowledging the rhetorical implications of the tablet enables us to think about it not just as a mode of delivery, but within its full range of rhetorical context.

Instead, many studies document what students and faculty generally do with the tablet, and what they like or dislike about the device (Eichenlaub, et al.; "iPad Study"; Bush and Cameron). Most prior tablet research also seems either extra-disciplinary, where data is collected without explicit attention to disciplines (Foresman; Truong), or intra-disciplinary, where data pertains to tablet usage within particular disciplines (Marmarelli and Ringle; Gronke; Schaffhauser). One partial exception to these general trends is a multidisciplinary tablet faculty learning group at Indiana University ("Completed Project"); its findings briefly mention how the tablet intersects with student reading, but do not focus on student writing.[1] Thus, amidst a large and growing body of knowledge on the tablet in higher education, Lanham's question largely remains unanswered: What does the tablet do *to us* or *for us* as writers across disciplines?

To fill this gap, we conducted over the spring and fall of 2011 a multidisciplinary, grant-funded, IRB-approved study at our Research-I institution that explored the following two questions: How does the tablet[2] impact scholarly writing practices across disciplines? How does the tablet impact the teaching of writing across disciplines? Our research extends prior studies about the tablet in higher education by being explicitly multidisciplinary and focused on scholarly writing practices. By integrating multidisciplinary faculty learning groups into our study, we sought to work within the rich tradition of faculty learning groups in Writing Across the Curriculum (WAC) (Carter; Gabelnick, et al.; Walvoord; Anson, *WAC*), particularly as they can be informed by technology (Reiss and Young).

Our study does not emerge from any particular interest in promoting tablets, but instead from a commitment to digital literacy, rhetoric and pedagogy inspired by such scholars as Cynthia Selfe and Kathleen Blake Yancey. They, like Lanham, insist that teachers of writing bear a responsibility to "pay attention to . . . technology" (Selfe, "Technology," 96) as a means of helping students "become the citizen writers of our country, the citizen writers of our world, and the writers of the future" (Yancey

1). Our study also enacts an abiding investment in cultivating multidisciplinary conversations about writing practices and about the teaching of writing, such as those fostered by Susan McLeod and Margot Soven, Art Young, and Toby Fulwiler. Through our study we hoped to create space for faculty and students across disciplines to think explicitly about the relationship between technology and writing. In the following sections we outline our research, discuss how the tablet can impact writing and the teaching of writing, and offer ideas for further research.

The Multidisciplinary Tablet Writing Project

Our university's Center for Instructional Technology awarded us two "Jump-Start Grants" to conduct multidisciplinary tablet projects. These grants included loaner iPad tablets for six faculty members[3] (including us) and up to 80 students in the following spring 2011 and fall 2011 undergraduate writing-intensive courses:

- Environmental Science Seminar: Ethical Challenges in Environmental Conservation (Junior/Senior level; 13 students);
- French 101: Advanced French Composition (two sections, taught by two different instructors; one section had 12 students, one had 11 students);
- Public Policy Seminar: News Writing and Reporting (Junior/Senior level; 16 students); and
- Writing 101: Academic Writing (First-year level; two sections of 12 students each).

Participants included six faculty members, who ranged in rank from adjunct to tenured professor, and 76 undergraduates who ranged in level from first-year through senior. Faculty members were provided with portable keyboards in addition to the iPad tablet; students were not.

We recruited participants by inviting faculty members in humanities, social sciences, and natural sciences with experience teaching writing and an ongoing interest in experimenting with their writing pedagogy. We collected quantitative and qualitative data from faculty and student participants through the following methods: a mid-term attitudinal survey (n=21; see sample questions in Appendix); an end-of term attitudinal survey (n=14; see sample questions in Appendix); student blogs written in one of the Writing 101 sections (n=12); one focus group with faculty participants (n=4); writing-process memos written in one of the Writing 101 sections (n=12); two one-on-one interviews with faculty participants; and teaching journals written by faculty (n=3). We performed qualitative analysis on data through a combination of observer impression, where we examined data and formed impressions, as well as through content analysis, identifying themes and topics that were prominent throughout the data ("Methods").

The tables below show the apps students and faculty in our study used for their scholarly work, and what kinds of writing they did with the tablet.

Table 1: Student Scholarly Apps and Writing

Course	iPad apps	Writing Practices
Environmental Science	Blackboard; Notes; Evernote; iAnnotate; GoodReader; iBooks; Dandelion; Stargazer; Word	reflective journal; calendar for assignments; notes on course texts; notes during class; notes about writing projects; major essays
French	Noterize[4]	respond to peer writing
Public Policy	SoundNote; Notes; Blackboard; Word	notes during a simulated in-class press conference; respond to email; notes during class; notes while reading; news stories; major essays
Writing	Notes; Blackboard; iAnnotate; GoodReader; iBooks; Word; Dropbox; Dragon	notes on course texts; notes during class; notes about writing projects; major essays

Table 2: Faculty Professional and Scholarly Writing

Discipline	Writing Practices
Environmental Science	notes during professional meetings; notes during class
French	respond to student writing; notes on course texts; notes during class
Public Policy	notes during professional meetings; notes during class; email; compose short (1-2 paragraph) drafts
Writing	notes during professional meetings; notes during class; email; compose short (1-2 paragraph) drafts; respond to student writing

How Did the Tablet Impact Scholarly Writing Practices across Disciplines?

According to our research, the tablet seems to increase distinctions between different phases of the writing process, especially between writing notes and in-depth composing. We adopt for this section Keith Hjortshoj's discussion of writing-process phases from *Understanding Writing Blocks*: prewriting, composing, revising, editing and release. In particular, we rely on his distinctions between *prewriting,* "includ[ing] everything the writer does in preparation for composing a text or a portion of a text … [such as] making preliminary notes and outlines, talking about the subject … thinking about the task" (25), and *composing*, "the process of generating new sentences and passages that might or might not appear in the finished product—committing words to paper, but not necessarily committing them to the audience" (25).

Writing Notes

One of the most frequently commented-on aspects of the tablet for faculty and student participants was that it improved their practice of writing notes, which falls into Hjortshoj's "prewriting" phase: "It is a convenient and quick way to take notes"; "I don't have to carry my heavy computer around to do writing assignments. In the same vein, I don't have to wait until I am at my computer or in the library to do assignments." While others have also indicated that tablet users appreciate the notes function (Gronke), our multidisciplinary perspective showed that notes are not limited to note-taking during class, but also include generative writing for longer, in-depth writing projects, and note-taking in the field during interviews. That study participants used the tablet for a myriad of different note functions, and commented on this aspect, suggests that using the tablet may have made more visible the distinctions that exist between writing as notes, which most participants found useful on the tablet, and in-depth composing, which most participants found not useful on the tablet (see In-Depth Composing section below).

Notes also emerged as a pedagogical tool through the tablet as different faculty employed notes in various capacities in their classrooms. Four of our faculty participants used iAnnotate for writing notes on student texts, for writing comments on scholarly articles, or by asking students to annotate and comment on their own research project drafts. In these instances, writers combined a scholarly reading practice (annotation) with writing (notes) as part of their work on larger discipline-specific research projects in the courses. Faculty also wrote notes to themselves about aspects of class they planned to follow up on in subsequent classes or adjust in future semesters. Students and faculty wrote to-do lists with notes in order to better organize and plan their scholarly endeavors.[5] As an easy-to-access archive of their thinking about their research through the notes format, writers could see evidence of both writing and thinking development over time. Although a pad of paper could

arguably achieve some of the same ends, the tablet seemed to provide participants a way of organizing multiple projects at once by capturing a text electronically to export into a fuller document or combine with another text.

We also discovered that the visibility of notes on the tablet prompted a productive moment of interchange between a faculty member and her students. One of the writing faculty members shared with her students her tablet notes about an on-campus student protest. She then annotated the notes to show students how the notes might be developed into three potential (and different) types of scholarly endeavors: a faculty research project on faculty-student partnerships; a student research topic about how to most effectively promote and publicize a cause; and an idea for a conference proposal on student-activist language. By sharing her notes and delineating three possible writing projects, she demonstrated that when we use notes in this intentional way, they help us remember what research is needed, how we might organize data, and what we might want to rethink or extend. She commented that "this note-taking function [when integrated into a larger discussion of the writing process], enabled students to slow down the research and writing process, to see that good writing takes time and ideas should be allowed to percolate throughout our everyday activities." That so many of our participants commented on writing notes suggests that the tablet encouraged both student and faculty writers to place greater value on notes and fostered greater awareness of their prewriting practices. For many student and faculty writers, the prewriting phase often is undervalued and invisible; students need mentoring throughout the writing process (Bean; Young). However, the readily available and portable notes function of the tablet made students themselves more aware of the value of notes, offering an opportunity to enhance both the practice of prewriting and teaching the critical thinking associated with it.

The ways in which notes emerged differently across each class speak to the complexities of disciplinary context. In the two first-year writing classes, for instance, taught from a humanities perspective, faculty asked students to read scholarly articles in-depth, which included writing annotations. In the public policy course, students were asked to take notes in the field as they reported on various events. In the French courses, students wrote notes on grammar and vocabulary definitions. Rebecca Nowacek suggests that part of what makes interdisciplinarity so challenging, but also so potentially useful, is the concept of the "double bind": "Double binds are those uncomfortable and perhaps inevitable situations in which individuals experience contradictions within or between activity systems (e.g., between the motives and tools within a single activity system or between the motives of two different activity systems) but cannot articulate any meta-awareness of those contradictions" (507). Nowacek's point is that these double binds emerge because of what David Russell has identified as a systemic problem with disciplinary divisions: faculty often

learn how to write from within their particular disciplines and are therefore underprepared in considering how their own discipline's activity systems are unique and contextualized.[6]

For faculty participants in our study, the tablet learning community created the opportunity for a multidisciplinary conversation about what we expect in student writing and about how we teach writing; this process and the ensuing conversations tapped into these double binds and offered faculty the opportunity to enact Nowacek's "meta-awareness of those contradictions." We contend that not only should faculty in learning communities engage in these kinds of multidisciplinary meta-discussions about their writing practices and the implications of "double-binds," but students should be invited to participate as well—both in faculty-student learning communities and within individual courses. By participating in such a group, faculty and students can deepen their consideration of writing practices—and beliefs about how writing should happen—potentially opening up additional avenues for cross-disciplinary dialogue beyond the tablet study.

In-Depth Composing

Despite the tablet's success with writing notes, most participants indicated that the tablet was difficult or counterproductive for in-depth composing, and instead chose their laptops for "the paper" or "the journal article." Comments about in-depth composing generally fell into three categories: 1) difficulty with the touchscreen ("Writing with our fingers and typing on the iPad] were clumsier than simply writing with a pen on paper would have been"); 2) frustration with word-processing functions ("local word processing applications . . . completely inadequate"); and 3) difficulty changing writing practices ("If I can't even remember my iTunes account, how am I going to take time to really understand the mechanisms for creating, saving, transferring files? I loved the iPad for notes because it was easier to organize my notes, file, keep track of my ideas, and I didn't lose random pieces of paper. But writing on it felt like too big of a change to be worth the learning curve.").

Taken together, these three categories of dissatisfaction suggest that the dislike of in-depth composing on the tablet, for some writers, may be connected primarily with a lack of familiarity and experience with touch-screen typing. Writing practices often are replete with personal idiosyncrasies, and writers might be disinclined to use a new technology for in-depth composing if they have already found mechanisms that work well for them, as would likely be the case for a faculty member. Indeed, while our study's faculty participants were willing to experiment with the tablet in their reading practices and in their *teaching* of writing, they were not as willing to experiment with the tablet for their own writing practices. As one faculty member commented,

> Although I often look for ways to enhance and strengthen my personal writing practices, I am reluctant to look for ways of deeply reconceiving how I write because I'd rather devote energy to the ideas and the projects I want to create. While I wish I could find ways of publishing even more, it felt like it would be a step back to learn to write on the iPad. . . . Some people of an earlier generation of scholars than me still write by hand because the way they think is connected to the medium through which they write. They may take advantage of certain new technologies, but not to change how they write.

Others have noted resistance and dissatisfaction with in-depth composing on the tablet (Kolowich; Gronke). Such findings make the tablet somewhat unique among other digital platforms, which studies have shown generally facilitate significant advantages to in-depth composing (Pennington; Hult; Reiss and Young). The advantages we now see with in-depth composing on most digital platforms, however, were not universally apparent when computers first emerged. Several early studies suggested that computers did not encourage critical revision (Hawisher, "The Effects") or caused underperformance (Dean). The tablet might be facing a similar trajectory as touch-screen technology is becoming more ubiquitous with infrastructures, phones and tablets; however, for the time being, the tablet seems to have a negative effect on in-depth composing for most students and faculty because of limited word-processing functionality such as composing for long periods of time, facility with the process of moving from thought to text, and moving and deleting text.

Although the tablet enables (and even fosters with deliberate attention in teaching) pre-writing as well as the concept that writing can happen in short bursts of time, we wonder at what cost. Do we expect students (and faculty) to have both a tablet and a laptop to enhance both pre-writing and in-depth composing practices? How likely is it for academic writers to see using two devices as enhancing their writing process, rather than hindering or complicating it?

How Did the Tablet Impact the Teaching of Writing across Disciplines?

Over twenty years ago, Gail Hawisher and Cynthia Selfe argued for deliberateness when integrating technology into the classroom: "All too frequently . . . writing instructors incorporate computers into their classes without the necessary scrutiny and careful planning that the use of any technology requires" ("Rhetoric" 35). Moreover, Janet Eldred argues that the effective use of technology requires linking it to the pedagogical goals of the course.[7] Such cautions are especially important with the tablet, since it runs the risk of being perceived as redundant technology, or it might not even be officially incorporated in the classroom but brought into use by

students outside of class. Faculty, therefore, might not perceive a need for "careful planning." The tablet, though, offers some markedly different features than laptops, and includes an ever growing and shifting range of apps. This complex realm of possibilities contrasts some of our expectations about technology. As Anson claims, "we see [technological advances] as a promise to simplify our lives and streamline our work" ("Distant Voices" 53). These concerns about simplification and about how well the tablet fits within the larger aims of a course emerged in our study as faculty reported that the tablet shaped their course design and pedagogy in the following two ways: writing assignments and responding to student writing.

Writing Assignments

Several faculty participants created new assignments specifically geared toward the tablet, most notably Environmental Science and Public Policy.[8]

1. *Environmental Science*. This faculty member viewed the tablet's increased portability and the environmentally related apps as an opportunity to encourage students to forge a closer relationship with the environment: "I had visions of students composing essays while sitting under an oak in [the forest], blogging about the latest environmental news from the Marketplace, and finding new cool apps that help us to live green!" To facilitate such engagement, she developed the following two tablet-specific writing assignments:
   - record experiences in nature through a tablet journal; and
   - record and annotate an interview about the environment with a community member.

   Despite student interest in these endeavors, though, her students expressed concern about the tablet's use of resources and energy: "Saved some paper . . . but not enough to justify manufacture/cost of the device." The faculty member began to question the inclusion of the tablet in her course: "In a class where I was asking students to think about the use of resources, I then saw that they were using iPads in addition to, rather than instead of, their laptops. It seemed to increase resource use rather than decrease it." She eventually came to see journaling on a tablet as ironic within the context of an Environmental Science course:

   > [The dandelion app] presents an image of a dandelion, with its fluffy, white seeds almost sparkling on the screen. You blow on the screen and—poof—the seeds disperse out into the electronic atmosphere. If my students are wasting time making wishes on electronic dandelions, then clearly we have a problem. Our challenge is to become more

connected to nature, to better understand our role as stewards and our impacts as citizens.

Because this teacher implicitly valued students connecting to nature in meaningful ways and appreciating their responsibilities as "stewards" and "citizens" of the natural world, her choice to integrate the tablet into her course was based on the tablet's potential to help students with these aspirations. Her growing hesitations over the tablet's inefficacy for teaching writing were based predominantly on this discipline-specific value. Although students were physically *in* nature, their focus was *on* the screen. In fact, they didn't need to sit among the trees to write their journal entries at all. Despite the tablet's portability, then, it interfered with, rather than enhanced, students' meaningful connections with nature.

2. *Public Policy.* Whereas the tablet seemed to the Environmental Science instructor to be counterproductive to some of the primary learning outcomes of her class, it had an affinity toward the broader learning objectives of the News Writing and Reporting seminar. This faculty member also shaped assignments based on the tablet, and saw the device as a way of facilitating his larger endeavor of introducing students to several crucial features of contemporary journalism: the need to have access to large and varying kinds of information in the field and the ability to deliver news stories quickly from the field. He designed the following writing assignments specifically using the tablet:
   - record weekly interviews around the campus and community;
   - record an in-class mock press conference; and
   - write news stories quickly and on deadline, often from the field.

   This faculty member found the tablet of great potential use within journalism: "The news gathering industry is in transition mode as exemplified by concepts such as 'backpack journalism,' in which one person takes everything s/he needs to cover a story in a variety of media formats." For News Writing and Reporting, then, it seems that the tablet was able to forward disciplinary aims by helping facilitate students' learning of real-world journalism.

Together, these experiences suggest that integrating the tablet may help faculty rethink writing assignments, but it also reinforces the importance of considering how a given technology intersects with the larger goals, discourse, activities, and aspirations of particular faculty and disciplines.

Responding to Student Writing

There is much literature on responding to student writing, and our study has been most influenced by research related to faculty responding styles (Straub and Lunsford; Anson, "Response Styles"), response and its relationship to writer development (Sommers; Hyland and Hyland) and the facilitative role of technology in response to student writing (Comer and Hammer; Lynne; Reiss and Young; Nortcliffe and Middleton).

We found that faculty used the tablets to respond to student writing in dramatically different ways. The first-year writing faculty chose not to use the tablet for responding to student writing. They indicated that they were reluctant to take the time to experiment with a new responding technology, and they were fairly content with their current response strategies and tools. The environmental science faculty member enjoyed the portability of the tablet because it provided a wider range of occasions for her to respond to student writing: "I liked that the iPad enabled me to take my work with me more easily. I could even respond to students' writing while I was at the playground with my children." The tablet, then, afforded her more cohesion between her professional and personal activities. For her, responding to student writing while "in nature" and with her children positively influenced her attitude toward response (she was a happier responder). Still, while she liked being able to read student papers at the playground, she much preferred commenting by hand and did not make much use of the tablet for responding.

The French teachers, however, both keenly interested in the tablet's potential to facilitate high-quality feedback efficiently, used the tablet much more extensively for responding to student writing. They used the Noterize app to provide color-coded and audio responses to student writing in one PDF file. Their students responded with enthusiasm: "It . . . enhanced the experience of receiving comments from my prof."; "having the ipad . . . made things more efficient (like receiving and storing my professor's comments)"; "I really like hearing the faculty feedback. Mostly because I would hear my prof musing about [the paper] . . . I also liked hearing the feedback because it was more personal and more like discussing it with [her]." One French faculty member indicated that she paid greater attention to her commenting because of the tablet and could focus both on grammar/text 'corrections' and the 'writing/writers.' She felt she was able to move beyond "corrective feedback" to become a more engaged reader of student writing (Vyatkina). Her interest in the tablet as a teaching and responding tool, her ongoing informal assessment of the way it shaped her teaching throughout the semester (teaching journal) and her participation in the research project all prompted a more critical analysis of her responding style and its influence on students.[9] Although certainly there are other options for audio or even video response to student writing,[10] this faculty member found the tablet's

apps and portability worked for her and enhanced the quality of her response and her own engagement with student writing. She commented, "Before this semester I was dreading teaching writing again," and she felt that students were often just "going through the motions" of revision after reviewing her comments on drafts. She was not engaged; they were not engaged. After experimenting with the tablet and her own responding style, she discovered a renewed commitment to teaching writing and, in fact, looked forward to teaching the course again.

The public policy faculty member used the tablet to read lower-stakes student writing and write brief comments, but chose not to use the tablet for more in-depth responses because he prefers instead to introduce students to journalistic red-pen editing and correction. He found the tablet a barrier to this mode of commentary. Although he could have explored virtual red-pen commenting options, the literal red-pen response is a deeply-held responding practice for him and one that he finds crucially embedded in his discipline.

Overall, faculty made decisions about using the tablet for responding based on 1) their perceived level of need to improve or experiment with responding strategies; 2) their perceived level of time, energy and availability for adjusting responding strategies; and 3) their perceptions about discipline-specific expectations and practices for responding to student writing. Thus, while the tablet yielded positive results for responding to student writing in the L2 courses (whose faculty were eager to experiment with responding strategies, despite the learning curve), students and faculty in the other classes seemed not to find value in the tablet for response to student writing because they already had strategies that worked, simply were not interested in developing a new strategy or felt that it departed from disciplinary conventions. These findings suggest to us that point of need, faculty investment and disciplinary context are factors that play a greater role in response than does the tablet itself.

Further Research

We see two critical areas for additional research:

1. *Student Writing*. Continued research is needed on the ways the tablet may affect scholarly reading and writing practices and the teaching of writing. Given our data from the French courses, we call specifically for more research on faculty responses to student writing and peer-response practices with the tablet or other e-reading devices: Is the tablet any different from other audio or video tools responders might use? How might the tablet influence the various faculty and student responding roles and purposes? Toward what ends?

2. *Power, Privilege, and the Tablet*. The question of access, familiarity, power and privilege with tablets will, we believe, affect literacy practices differently across individuals and institutional contexts. Although our study was conducted at a private, Research-I institution with strong support for technology grants, many of our students' experiences reveal what David Bolt and Ray Crawford (and others) term the "digital divide."[11] We call for more research into how tablets intersect with assumptions about students' access to technology and its use in scholarly contexts.[12] How might tablets reduce or expand the divide between students who do or do not have access to technology? Given the portability and convenience of tablets, will they provide an educational advantage or disadvantage to those who have them?

Conclusion and Implications: Did the Tablet Improve Student Writing?

Our research certainly indicated that the tablet did things *to us* and *for us* as writers and teachers of writing, but—and here is the implied significance of Lanham's question—to what end? The tablet works best when used for the following occasions: prewriting and making research and writing processes visible for students. We know the tablet did not work well for in-depth composing. Encouraging teachers of writing to be more innovative in assignment creation and response strategies and facilitating interdisciplinary conversations, unhinging us from our double binds, should have a positive effect on student writing by helping students understand the significance of context, audience and purpose within and across disciplines. However, when we asked the faculty participants whether student writing improved with the integration of the iPad tablet in their courses, only one of the six (a French faculty member) indicated that she thought it probably did; the other five were unsure. The tablet runs the risk of seeming to users that it is just a more portable, lighter version of a computer. Our data, however, reveal limitations with in-depth composing on a tablet and thus demonstrate that the tablet is not just a more portable, lighter computer. Without deliberate attention to the tablet as a unique technology, we face a possible risk of reinforcing, or abiding by, or not noticing, ineffective writing practices. Without an explicit discussion about writing practices and conditions, students who are encouraged to—or choose to of their own volition—use the tablet for scholarly writing may in fact end up adapting their writing practices to meet the limited functionality of the device. We are concerned that the material conditions of writing on the tablet might dictate practice.

Our own personal experiences with the tablet reflect in some ways this seduction. As researchers who not only were studying faculty and student use of the tablet, but also enthusiastically experimenting with tablets ourselves (each of us received an

iPad for two semesters as part of our research grants), we were interested in identifying ways this device might transform the teaching of writing or the ways that we understand those practices. Any limitations we identified initially we attributed to user error or to lack of experience, rather than limitations in the device itself. During the academic year, however, our enthusiasm for the tablet diminished. We found it practical for some professional purposes (taking notes during meetings, skimming various kinds of texts, writing quick emails, pre-writing, etc.), but we found ourselves using it less and less for our own scholarly and work-related writing. This gradual shift in practice, though, may have occurred in part because we are more experienced writers, and we work to be aware of our writing practices. Students, many of whom are presumably less experienced as writers, may not be as inclined to embrace the agency demanded by the tablet and could instead let the device shape and dictate their writing practices, perhaps in ways that may challenge longstanding values in academia: namely, the importance of in-depth, sustained composing.

Addressing this possibility places heightened emphasis on what Dennis Baron has argued—that we should continue to question and notice our priorities with technology and literacy practices:

> But maybe the most significant thing that we can learn from putting today's digital reading and writing in the context of five thousand years of literacy history, using past results to predict future performance, is that the digitized text permeating our lives today is the next stage, not the last stage, in the saga of human communication, and that it's impossible to tell from what we're doing now exactly where it is that we will be going with our words tomorrow. (246)

Baron's point, like Lanham's before him, and like others before and since, is that the most meaningful way we can work with technologies such as the tablet is to pay attention to and reflect on the ways in which they shape writing practices. We discovered that the tablet reshaped for some students and faculty several key writing practices, such as writing notes. Our multidisciplinary tablet faculty-learning group enabled faculty to design writing courses that were more deliberate and innovative; it helped make those courses more engaging for students in a variety of ways. We found that interdisciplinary conversations about writing shifted with the introduction of the tablet.

While other scholars have made the point that technologies should be deployed with deliberate attention, we want to underscore that the tablet may seem like it is not necessarily a new technology. To some, the tablet has the appearance of merely being a smaller, more portable computer that uses apps instead of a hard drive. This may make these individuals unlikely to differentiate the tablet from a laptop. As

such, some faculty might not see the need to spend time deliberately integrating the tablet into a classroom. Unlike medium-specific writing occasions, where teachers might ask students to design a webpage or use Twitter, students might on their own be using tablets for all sorts of writing assignments without even finding it relevant to communicate that choice to the teacher. However, the tablet shapes writing practices differently than does a computer. Thus, this lure of similarity between computers and tablets creates even more urgency for teachers and students across disciplines to reflect on the contexts for writing, to be aware of how material conditions shape writing, and to make deliberate choices about which kinds of technologies they will use for different writing performances. In this way, students and faculty alike will be able to have more control over what the tablet does to us and for us as writers across disciplines.

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Notes

1. Their final report briefly notes, "[T]he iPad also suggests utility as a reading device for electronic textbooks (as well as a method of reviewing, creating, and responding to other instructional material and media)" ("Completed Project").

2. Our study focused on iPad tablets specifically, but we use the more general term *tablet* throughout the essay.

3. The French faculty members were awarded loaner iPads for their courses as a separate "Jump Start" grant but were included in this research study.

4. Noterize has since been purchased by Nuance.

5. These kinds of notes reflect what Eichenlaub, et al., term, "Organizing academic workflows with the iPads": "Project iPad provided participants with the opportunity to develop new approaches for time management and organization in their personal and academic lives" (18).

6. See also Carter, "Ways of Knowing, Doing, and Writing in the Disciplines."

7. We have found the work of Cynthia Selfe (Multimodal), Wayne Jacobson and Donald Wulff, Deborah Hatch and Kimberly Emmons, and Erping Zhu and Matthew Kaplan useful in

making the case with faculty across the disciplines for an intentional inclusion of the tablet and alignment with course and disciplinary learning goals.

8. The other faculty modified existing assignments.

9. See also Ahern-Dodson and Reisinger, "Moving beyond Corrective Feedback to Engage Students as Writers and Faculty as Readers." (MS in Preparation)

10. Camtasia and Jing, for instance, provide audio and video feedback options. For research on the impact of audio and video feedback, see Reynolds and Russell; and Jones, Georghiades, and Gunson.

11. Several student participants expressed a disinclination to purchase "expensive" apps; some students indicated familiarity with the iPad tablet because one of their family members already had one, and one student planned on asking her parents for one as a Christmas gift. Meanwhile, other students indicated feeling newly equipped to navigate academia with a portable, continual connectivity that they previously did not have through phones, much less a tablet.

12. See Elmer-DeWitt and "iPad Ownership" for demographics of iPad ownership; Steven J. Vaughan-Nichols on the iPad's impact on K-12 systems; Pillar on the "technological underclass" (218); Selfe and Selfe on "domination and colonialism associated with computer use" (66); and Bush and Cameron on ADA compliance.

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Appendix

Sample Questions from Mid-Term and End-of-Term Attitudinal Surveys

- Please list some adjectives or phrases describing your experience using the iPad to read course texts.
- What do you like about using the iPad for scholarly reading?
- What do you dislike about using the iPad for your scholarly reading?
- Do you have any other comments about your experience using the iPad for scholarly reading?
- Have you used the iPad for scholarly writing this semester?
- List some adjectives or phrases describing your experience using the iPad for scholarly writing.
- What do you like about using the iPad for scholarly writing?
- What do you dislike about using the iPad for your scholarly writing?
- Do you have any other comments regarding your use of the iPad for scholarly writing?